

NATIONAL SHORELINE MANAGEMENT STUDY (NSMS)

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NSMS Authority

- Section 215(c), WRDA 1999
- Report to Congress on the State of the Shores of the United States
- Identifies the contents of the report
 - Descriptive Information
 - Recommendations
- Use specific location data from Atlantic Ocean, Pacific Ocean, Great Lakes, and Gulf of Mexico

Section 215(c) NSMS

Report on the Shores of the U.S.

Describing:

- Erosion and accretion, and causes
- Economics and environmental effects of erosion and accretion
- Resources committed by Federal, State, and local agencies to restore and renourish shores
- Systematic movement of sand along the U.S. shores

NSMS - Legislative Components (Sec. 215c, WRDA 1999)

Describe

**Geomorphic – Extent
of Erosion and
Accretion, and Causes**

**Economic
Implications
of Erosion &
Accretion**

**Environmental
Implications of
Erosion &
Accretion**

Describe

**Resources
Committed by
Fed, State, Local
Govts to Restore
& Renourish
Shores**

**Systematic
Movement of
Sand along U.S.
Shores**

Recommend

**Objective 1:
Appropriate
Levels of
Federal &
Non-Federal
Participation
in Shore
Protection**

**Objective 2:
Use of a
Systems
Approach to
Sand
Management**



Use Data from the Coasts of the Atlantic, Pacific, Great Lakes and Gulf of Mexico

Section 215(c) NSMS Origin

- Driven by Non-Federal partners
 - Morass of agency coastal programs
 - Need framework to resolve programmatic conflicts, promote collaboration or system approaches
 - Need for inter-agency approaches
 - Need regional perspectives
- **One of Several Interrelated Coastal Initiatives**
Regional Sediment Management Demonstration
Program (Sec. 516, WRDA 1996)

Some Relevant Past Studies

- **1971 USACE National Shoreline Study**
- **1994 USACE Review of the Corps Approach to the Problem of Shoreline Erosion Control (Final Report, 1996)**
- **1990 NRC - Managing Coastal Erosion**
- **1995 NRC - Beach Nourishment and Protection**
- **1999 & 2000 Heinz Center reports – Hidden Costs of Coastal Hazards & Evaluation of Erosion Hazards**

Comparison of NSS vs NSMS

NSS: RHA 1968 Sec. 106

1. Determine significant areas of erosion along the coasts & shorelines
2. Identify areas where serious erosion presents serious problems
3. Describe generally the most suitable type of remedial action for areas with serious erosion problems
4. **Provide preliminary cost estimates for remedial actions**
5. Recommend priorities among serious problem areas for action to stop erosion
6. Provide information & recommendations to assist in creation & implementation of State & local Coast & shoreline erosion programs
7. Develop recommended guidelines for land use regulation in coastal areas taking into consideration all relevant factors
8. Identify areas where title uncertainty exists


NSMS: WRDA 1999 Sec. 215(c)

1. Describe extent of erosion **& accretion** & causes along the shores of the U.S.
2. Describe the economic **& environmental effects** caused by, erosion & accretion
3. Describe resources committed by Federal, State, & local governments to restore & renourish shores
4. **Describe systematic movement of sand along the shores of U.S.**
5. Recommendations regarding:
 - (i) appropriate levels of Federal & non-federal participation in shore protection;
 - (ii) use of a systems approach to sand management**

An aerial photograph of a coastal area. On the left, there are several multi-story buildings with balconies, likely hotels or apartments. A sandy beach runs along the coast, and a long wooden pier extends into the ocean. The ocean is dark blue with white waves breaking near the shore.

Budget/Funding

- **FY02** \$ 300 K to initiate study
- **FY03** \$ 500 K in Budget Request
- **FY04&05** \$ 6.2 M anticipated

An aerial photograph of a coastal town, likely in Hawaii, showing a mix of residential buildings, a sandy beach, and turquoise ocean water. The town is situated along a narrow strip of land, with a road and various structures visible. The ocean is a deep blue-green color, and the beach is a light tan color. The text is overlaid on the top half of the image.

1st Year Study Objectives include:

- **Develop study scope & identify 1st year objectives**
- **Outreach to other stakeholders**

More 1st Year Study Objectives:

- **Initiate assessment of status of coastal change knowledge & needed information**
- **Initiate review of legislative & regulatory aspects**
- **Describe Corps resources**
- **Identify economic issues & needed analysis**
- **Develop strategy to collect information from & collaborate with other agencies**
- **Assess potential contributions of shoreline demonstration programs**

1st Year Activities include

- Update Corps projects & cost data from 1996 Corps report
- Initiate review of literature & data to
 - assess status of knowledge of coastal change, data needs & availability and
 - Identify tasks to describe national shoreline characteristics & causes of erosion or accretion
- Update development patterns on 1971 critical erosion shores
- Review economic literature & identify economic issues & needed analysis – Workshop
- Examine RSM & other demonstrations

Other Activities This Year

- Engage other Federal agencies
- Engage other stakeholders
- Develop NSMS website with study documents and linked to other stakeholder relevant information

Next Year?

- Complete review of status of shoreline change analysis & data collection
- Identify technical guidelines for collecting & analyzing shoreline data
- Initiate economic research & analysis
- Review progress of RSM & other demonstration programs

An aerial photograph of a coastal area. On the left, a sandy beach meets the ocean. To the right of the beach is a line of dunes and some vegetation. Further inland, there is a residential neighborhood with houses and streets. A large, dark, rectangular area, possibly a field or a large building, is visible in the lower center. The text "Your Input" is overlaid in the center of the image.

Your Input